STUDYING LOCAL FAUNA AND ENGAGING IN WILDLIFE CONSERVATION

Background Information:

“World Animal Day,’ was established in 1931 at an ecology conference where participating scientists wanted to draw attention to the fate of endangered species. This day has evolved to serve as a celebration for all animal life, a concept that has been supported for years by organizations not only in the US, but also in many countries on an international level. October 4th, the day set aside for activities and events, was selected to recognize the day of St. Francis of Assisi, the patron saint of animals. Aside from religious convictions, reverence and respect for animals have been a part of cultures throughout the world. Mahatma Gandhi went so far as to proclaim that: “The greatness of a nation and its moral progress can be judged by the way its animals are treated.”

Whatever the motivation, we as educators can encourage students to become responsible citizens by engaging them in activities that will develop an acknowledgement and appreciation of the diverse role animals play in our communities. We can begin by studying the fauna that has become our neighbors and recognizing that each has a niche within the community. The extension of this idea can branch out to investigate the diversity and status of species that exists in our state, our country and in environments that represent unique areas and creatures of the world.

To understand the scope of these areas, it is beneficial to know the terminology that relates to the organization of animals’ domains.

* Biome: Ecosystems in which several habitats intersect to include deserts, tundras, grasslands and rainforests. The Earth is one large biome.
* Ecosystem: The environment consisting of living (biotic), the plants and animals, and non-living (abiotic), the physical and chemical, components.
* Community: All the populations living in an area that interact with each other.
* Population: The organisms of the same species living in an area at the same time such as birds.
* Range: The area in which an animal travels to secure the basics for survival.
* Habitat/Territory: A place where organisms live specific to a population such as a stream.
* Niche: The job of an organism in the environment such as that of producers, consumers, decomposers and scavengers.

If students conduct an ecological study an area near their residence or schools, they will discover a variety of animals sharing the same habitat. Organisms can exist together because they do not all have the same needs and have different niches; however, the habitat must supply the needs of organisms such as food, water, temperature, oxygen, and minerals or they will move to a more suitable area. In addition, to survive in a habitat, the fauna must deal with the processes of competition and predation and can benefit from the processes of cooperation and symbiosis.

Students can become backyard naturalists by investigating the habitats and its inhabitants in the area that surrounds their residences. This requires them to acquire a knowledge base of the local flora and fauna in an area that they have selected and mapped out. Questions to guide their investigations can include the following: What habitats are located in your selected area? What types of plants and animals live there? What types of observations can you make to conduct an inventory of the local flora and fauna? Hands-on exploration and research can be utilized to determine the species that exists in the area. Direct Observation and recording what is discovered is valuable knowledge obtained through first-hand experiences.

Detrimental consequences of an event that affects one species of a community can affect the others adversely. Resources (water, oxygen, carbon dioxide) are essential to an organism’s survival and natural and manmade pollutants adversely alter environments. Consequently, conservation and protection often become necessary to provide for all members of a community and often recycling to augment conservation practices becomes critical to the existence of a species. If conservation and protection efforts fail, species become endangered or face extinction.

Studies in Environmental Science can include the interdisciplinary study of the physics, chemistry, biology, soil science, geology and geography of an area to identify species and problems relating to their survival. Awareness of the ecological components of an environment to develop an appreciation the roles of fauna that results in a high internal locus of control can precede the study of environmental concerns connected to human influence. Environmental engineering projects can emphasize the need to create solutions to environmental problems that improve environmental quality.

Environmental Education has existed since the Environmental Education Act of 1970, focusing on the realization that new education was needed to generate concern for improving environmental conditions. Public interest motivated its development with emphasis on stewardship and the application of knowledge to the implications of social and environmental issues that relate to science and technology.

More recently, Richard Louv, an accomplished author and recipient of the Audubon Award (2008)*,*  wrote a book entitled, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder.* He discusses “nature deficit disorder” and emphasizes that it is a description of the human costs of alienation from nature. He claims that this alienation affects children negatively and influences adult development. Louv supports direct exposure to nature as a healthy component of the physical, emotional and spiritual development of children. He extends this idea to believe that experiences in nature serve as therapy sessions for depression and solutions for obesity and ADD. Louv presents evidence that Environment Education dramatically improves standardized test scores and grade point averages and develops skills in problem solving, critical thinking, and decision making, as well as stimulates creativity.

**Get out of the house and go outside to investigate an outdoor space and to observe the flora and fauna that share it with us. Perhaps in doing so, you will take action to “think locally, act globally.”**

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This site presents a synopses and reviews of Richard Louv’s book, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder.*

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This site provides background information for ecosystems, biomes and habitats.

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This site describes the mission of the organization and suggestions for holding an event to celebrate wildlife.

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